

Ashford & St Peter's Hospitals

NHS Foundation Trust

Middlesex, UK



Rapid response to an emergency cooling requirement

Ashford Hospital in Middlesex represents one of two sites that form the medium sized district general hospital, Ashford & St Peter's Hospitals NHS Foundations Trust; the other site being St Peter's Hospital in Surrey. The Trust, formed in April 1998 following a merger of the two hospitals, represents the largest provider of acute hospital services throughout the Surrey region, serving a population of more than 380,000 people.

Ashford Hospital provides a wide range of medical and day surgical services, outpatients' services, ophthalmology, a dedicated stroke rehabilitation unit and incorporates the Ashford Health Centre and a Rapid Access Centre. St. Peter's Hospital was originally built to serve casualties of the Second World War and since then has been rebuilt, developed and extended to include maternity services, a clinic area and a new operating theatre complex.

At Ashford Hospital, the chilled water to the Outpatients Department's air conditioning system was being provided by two packaged air cooled chillers that were still operating on the HCFC refrigerant R22. Both units were manufactured in 1988 and had become unreliable. In fact, one unit had already failed beyond economic repair, leaving a single chiller to provide all cooling requirements for the building. However, in May 2012 this chiller also failed and although there was an engineer on site who tried to repair it, there was no hope of a successful outcome.

Challenges

Since Johnson Controls recently replaced chillers at St Peter's Hospital, Ashford Hospital contacted our Retrofit team to see if we could provide them with details of companies able to deliver a chiller hire service. Not aware that Johnson Controls offers such a service, we explained that we could fulfil this requirement.

Ultimately Johnson Controls took full responsibility for ensuring the hospital had cooled water being pumped round the air conditioning system in its Outpatients Department.

Finding the Right Solution

- ▶ Within two weeks of the original call from Ashford hospital we had removed the two old YCSA chillers and installed a single hired-in chiller to provide a temporary cooling solution.
- ▶ In the meantime, Ashford Hospital ordered a brand new YORK YLCA 120 TP chiller, which was shipped to site just 2 weeks and 2 days after the hired-in chiller had been installed.



Ashford Hospital Benefits

- ▶ Our Retrofit group's expertise in temporary cooling solutions, HVAC products, project management and installation services enabled Ashford Hospital to use one supplier for the entire project.
- ▶ By selecting the YORK® YLCA model, the hospital benefited from class-leading technologies, a compact footprint and superior energy efficiency; all of which optimise the total cost of ownership.
- ▶ The YORK® YLCA range of air cooled chillers use HFC 410A refrigerant which has zero Ozone Depleting Potential and offers users high efficiency at full and partial loads, as well as reduced levels of noise.

Exceeding Expectations

- ▶ Our solution was delivered with the minimum amount of disruption to the hospital's daily operations. This included us keeping the temporary chiller running until the last possible moment before switching over to the new permanent YLCA unit.
- ▶ The installation of the YLCA chiller met with the hospital's requirements to keep hire costs to a minimum as the temporary chiller was going to be needed until the end of 2012 at least (a hire period of around 6 months).
- ▶ The removal of the hired in chiller and the installation of the YLCA chiller was all completed within just one day.



The newly installed YLCA chiller unit

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